

# COMPUTING SCIENCE MAJOR: FALL 2020 GRADUATION PLANNER

Name: \_\_\_\_\_ Student ID: \_\_\_\_\_ Date: \_\_\_\_\_

## PROGRAM REQUIREMENT OVERVIEW

A minimum of 120 units are required to complete the Bachelor of Science (BSc) in Computing Science Program. This consists of:

### Lower Division (54 - 55 units)

- CMPT/MACM/MATH/STAT (39 - 40 units)
- WQB courses (15 units)



### Upper Division (45 units)

- CMPT/MACM/MATH (39 units)
- Elective courses (6 units)



General Electives



120 Units Overall

**CONTINUANCE GPA:** Students who do not maintain at least a 2.40 CGPA, will be placed **on probation in the School of Computing Science**. Courses available to probationary students may be limited. Each term, these students must consult an advisor prior to enrollment and must achieve either a term 2.40 GPA or an improved CGPA. **Students who fail to do so may be removed from the program.**

## LOWER DIVISION REQUIREMENTS (100/200) – 54 - 55 units – Complete all of:

COMPUTING SCIENCE		
<input type="checkbox"/> CMPT 120	<input type="checkbox"/> CMPT 276	<input type="checkbox"/> MATH 151 OR 150
<input type="checkbox"/> CMPT 125	<input type="checkbox"/> CMPT 295	<input type="checkbox"/> MATH 152
<input type="checkbox"/> CMPT 127	<input type="checkbox"/> MACM 101 (B-SCI) *	<input type="checkbox"/> MATH 232 OR 240
<input type="checkbox"/> CMPT 225 *	<input type="checkbox"/> MACM 201	<input type="checkbox"/> STAT 270

\* Necessary courses to enroll into most upper division CMPT classes

## ELECTIVE & BSc REQUIREMENTS:

REQUIRED WRITING
<input type="checkbox"/> CMPT 105W
<input type="checkbox"/> CMPT 376W (3 UD units)

REQUIRED WQB	
<input type="checkbox"/> B-SCI	<input type="checkbox"/> B-HUM
<input type="checkbox"/> B-SOC	<input type="checkbox"/> B-HUM
<input type="checkbox"/> B-SOC	

BSc CREDENTIAL
<input type="checkbox"/> MACM 316
<input type="checkbox"/> Additional course from Tables I or III
<input type="checkbox"/> Additional course from Tables I or III

TABLE III: COMPUTING MATHEMATICS	
<input type="checkbox"/> MATH 308	<input type="checkbox"/> MACM 401
<input type="checkbox"/> MATH 340	<input type="checkbox"/> MACM 442
<input type="checkbox"/> MATH 343	

UPPER DIVISION ELECTIVES	
<input type="checkbox"/> ANY 3XX/4XX	<input type="checkbox"/> ANY 3XX/4XX

## UPPER DIVISION REQUIREMENTS (300/400) – 45 units:

Requirements for breadth, depth and BSc (next page)

TABLE I: COMPUTING SCIENCE CONCENTRATIONS					
Artificial Intelligence	Computer Graphics & Multimedia	Computing Systems	Information Systems	Programming Languages & Software	Theoretical Computing Science
<input type="checkbox"/> CMPT 310	<input type="checkbox"/> CMPT 361	<input type="checkbox"/> <b>CMPT 300</b>	<input type="checkbox"/> CMPT 353	<input type="checkbox"/> CMPT 373	<input type="checkbox"/> <b>CMPT 307</b>
<input type="checkbox"/> CMPT 340	<input type="checkbox"/> CMPT 363	<input type="checkbox"/> CMPT 305	<input type="checkbox"/> CMPT 354	<input type="checkbox"/> CMPT 383	<input type="checkbox"/> CMPT 308
<input type="checkbox"/> CMPT 411	<input type="checkbox"/> CMPT 365	<input type="checkbox"/> CMPT 371	<input type="checkbox"/> CMPT 441	<input type="checkbox"/> CMPT 384	<input type="checkbox"/> CMPT 404
<input type="checkbox"/> CMPT 412	<input type="checkbox"/> CMPT 461	<input type="checkbox"/> CMPT 379	<input type="checkbox"/> CMPT 454	<input type="checkbox"/> CMPT 473	<input type="checkbox"/> CMPT 405
<input type="checkbox"/> CMPT 413	<input type="checkbox"/> CMPT 464	<input type="checkbox"/> CMPT 431	<input type="checkbox"/> CMPT 456	<input type="checkbox"/> CMPT 475	<input type="checkbox"/> CMPT 407
<input type="checkbox"/> CMPT 414	<input type="checkbox"/> CMPT 466	<input type="checkbox"/> CMPT 433	<input type="checkbox"/> CMPT 459	<input type="checkbox"/> CMPT 477	<input type="checkbox"/> CMPT 408
<input type="checkbox"/> CMPT 417	<input type="checkbox"/> CMPT 469	<input type="checkbox"/> CMPT 471	<input type="checkbox"/> CMPT 470	<input type="checkbox"/> CMPT 489	<input type="checkbox"/> CMPT 409
<input type="checkbox"/> CMPT 419		<input type="checkbox"/> CMPT 479	<input type="checkbox"/> CMPT 474		<input type="checkbox"/> MACM 300
		<input type="checkbox"/> CMPT 499			

## OPTIONAL REQUIREMENTS:

COMPUTING SCIENCE CO-OP EDUCATION				
<input type="checkbox"/> CMPT 426	<input type="checkbox"/> CMPT 427	<input type="checkbox"/> CMPT 428	<input type="checkbox"/> CMPT 429	<input type="checkbox"/> CMPT 430

## SUMMARY OF REQUIREMENTS:

Requirement	Complete	In Progress	Total	Remaining
Breadth _____ (15)				
Depth _____ (12)				
BSc _____ (9)				
Writing _____ (3)				
Total Units (min 120)				
Upper Division Units (min 45)				
CS Upper Division Units (min 39)				

## COMPUTING SCIENCE MAJOR: FALL 2020 GRADUATION PLANNER

### ACADEMIC REQUIREMENTS

---

#### LOWER DIVISION REQUIREMENTS (or equivalents):

- MATH 154/157 and 155/158, with grades of B+ or higher, may substitute MATH 150/151 and 152.
- WQB requirements: Students are required to complete 6 units of writing (W), 6 units of Breadth Science (B-Sci), 6 units of Breadth Social Science (B-Soc), 6 units of Breadth Humanities (B-Hum) and 6 units of Undesignated Breadth (UB).
- Computing Science students automatically fulfill their WQB requirements of 6 UB units with MATH courses and 3 B-Sci units with MACM 101 and 6 W units with CMPT 105W and CMPT 376W. Some WQB courses may fulfill two requirements. Some courses have multiple designations. For complete WQB regulations please refer to: [http://www.sfu.ca/ugcr/for\\_students.html](http://www.sfu.ca/ugcr/for_students.html).

#### UPPER DIVISION REQUIREMENTS:

- **Breadth requirement (15 units)**  
Five courses from the six areas of Table I must be completed. CMPT 300 and 307 are mandatory; in addition to these two, choose three more courses from the other three columns of Table I.
- **Depth requirement (12 units)**  
Four 400-level courses from Table I are required. These are **in addition** to the five breadth courses above (excluding CMPT 415, 416, and 498 which may be included by special permission).
- **Additional units for the BSc, BEd or BA Credential**
  - BSc (9 units). Completion of MACM 316 plus two **additional** courses chosen from Tables I or III.
  - BEd (3 units). One additional CMPT course from Table I or III, to total at least 30 UD CMPT units.
  - BA (3 units\*). One additional CMPT course chosen from Table I or III, to total at least 30 UD CMPT units. \*To fully complete the BA credential, 15 units must be completed in the Faculty of Arts and Social Sciences (FASS) including at least 6 upper division FASS units.
- **Writing requirement (3 units)**  
CMPT 376W required to satisfy UD W requirements.

Note: The following courses may be counted as being part of Tables I or III with permission of the School: CMPT 318, 415, 416, 496, 497, 498.

#### ELECTIVE COURSES

Students will have room to take additional elective credits in order to complete 120 credits required for graduation.

#### FACULTY OF APPLIED SCIENCE RESIDENCY REQUIREMENTS

At least two thirds of the total Upper Division (UD) units in the program must have been completed at Simon Fraser University. Please refer to current SFU calendar for details.

#### CONTINUATION REQUIREMENTS

Students who do not maintain at least a 2.40 CGPA, will be placed **on probation by the School of Computing Science**. Courses available to probationary students may be limited. Each term, these students must consult an advisor prior to enrollment and must achieve either a term 2.40 GPA or an improved CGPA. **Students who fail to do so may be removed from the program.**

#### WQB REQUIREMENTS

Students need to complete:

- One Lower Division (LD) Writing Course (CMPT 105W)
- One Upper Division (UD) Writing Course (CMPT 376W)
- 6 units of Breadth Science (B-Sci) (MACM 101 and one other B-Sci)
- 6 units of Breadth Social (B-Soc)
- 6 units of Breadth Humanities (B-Hum)
- 6 units of Undesignated Breadth (UB) (Math 150/151 and Math 152)

Please refer to: [http://www.sfu.ca/ugcr/for\\_students/wqb\\_requirements/breadth.html](http://www.sfu.ca/ugcr/for_students/wqb_requirements/breadth.html) for courses that fulfill these requirements.

#### CO-OPERATIVE EDUCATION

Combines work experience with academic studies—all students are encouraged to apply. Co-op does not count towards academic credits. Co-op is not mandatory; however, three work terms must be successfully completed in order to obtain an undergraduate degree with a co-op designation. For more information about Co-op, please see: <http://www.sfu.ca/coop/programs/cmpt/prospective.html>.

#### ADVISING

**Drop-In Advising** is available at the Surrey and Burnaby campus for students in the Computing Science degree program. Please see the online calendar here <https://booking.cs.sfu.ca/adbooking/calendar.cgi> to view drop-in times or email [asadvise@sfu.ca](mailto:asadvise@sfu.ca).

**Please bring a copy of your advising transcript (download at [go.sfu.ca](http://go.sfu.ca)) with you to the advising session.**